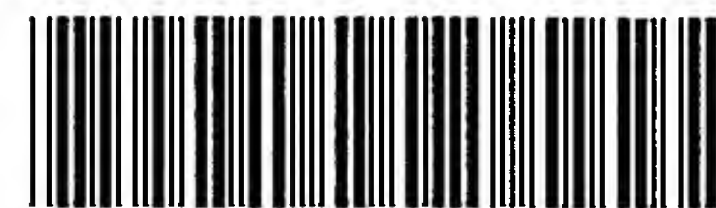# RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/604,340 A

Source: 1600 - EFS

Date Processed by STIC: 7-15-05

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RAW SEQUENCE LISTING   DATE: 07/15/2005
PATENT APPLICATION: **US/10/604,340A**   TIME: 08:17:01

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Output Set: **N:\CRF4\07152005\J604340A.raw**

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 5 <120> TITLE OF INVENTION: Decreasing gene expression in a mammalian subject in vivo
via
 6        AAV-mediated RNAi expression cassette transfer
 8 <130> FILE REFERENCE: 2
10 <140> CURRENT APPLICATION NUMBER: US 10/604,340A
11 <141> CURRENT FILING DATE: 2003-07-13
13 <160> NUMBER OF SEQ ID NOS: 12
15 <170> SOFTWARE: PatentIn version 3.2
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 6437
19 <212> TYPE: DNA
20 <213> ORGANISM: Artificial
22 <220> FEATURE:
23 <223> OTHER INFORMATION: sequence for recombinant adeno-associated viral vector,
including
24        plasmid backbone, with AAV2 internal terminal repeats that flank
25        expression cassette; referred to as AAV2/2 CMV luciferase
28 <220> FEATURE:
29 <221> NAME/KEY: CDS
30 <222> LOCATION: (1228)..(2883)
31 <223> OTHER INFORMATION: luciferase cDNA
33 <400> SEQUENCE: 1
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38 tcactcatta ggcacccccag gctttacact ttatgcttcc ggctcgtatg ttgtgtggaa     180
40 ttgtgagcgg ataacaattt cacacaggaa acagctatga ccatgattac gccagattta      240
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56 ctgcccactt ggcagtacat caagtgtatc atatgccaag tacgccccct attgacgtca      720
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66 actccgcccc attgacgcaa atgggcggta ggcgtgtacg gtgggaggtc tatataagca     1020
68 gagctggttt agtgaaccgt cagatcctgc agaagttggt cgtgaggcac tgggcaggta     1080
70 agtatcaagg ttacaagaca ggtttaagga ccaatagaaa ctgggcttgt cgagacag       1140
72 agaagactct tgcgtttctg ataggcacct attggtctta ctgacatcca ctttgccttt     1200
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80  10                  15                  20                  25
82 ctg cat aag gct atg aag aga tac gcc ctg gtt cct gga aca att gct   1350
83 Leu His Lys Ala Met Lys Arg Tyr Ala Leu Val Pro Gly Thr Ile Ala
84                      30                  35                  40
86 ttt aca gat gca cat atc gag gtg gac atc act tac gct gag tac ttc   1398
87 Phe Thr Asp Ala His Ile Glu Val Asp Ile Thr Tyr Ala Glu Tyr Phe
88              .45                  50                  55
90 gaa atg tcc gtt cgg ttg gca gaa gct atg aaa cga tat ggg ctg aat   1446
91 Glu Met Ser Val Arg Leu Ala Glu Ala Met Lys Arg Tyr Gly Leu Asn
92          60                  65                  70
94 aca aat cac aga atc gtc gta tgc agt gaa aac tct ctt caa ttc ttt   1494
95 Thr Asn His Arg Ile Val Val Cys Ser Glu Asn Ser Leu Gln Phe Phe
96      75                  80                  85
98 atg ccg gtg ttg ggc gcg tta ttt atc gga gtt gca gtt gcg ccc gcg   1542
99 Met Pro Val Leu Gly Ala Leu Phe Ile Gly Val Ala Val Ala Pro Ala
100 90                  95                  100                 105
102 aac gac att tat aat gaa cgt gaa ttg ctc aac agt atg ggc att tcg   1590
103 Asn Asp Ile Tyr Asn Glu Arg Glu Leu Leu Asn Ser Met Gly Ile Ser
104                     110                 115                 120
106 cag cct acc gtg gtg ttc gtt tcc aaa aag ggg ttg caa aaa att ttg   1638
107 Gln Pro Thr Val Val Phe Val Ser Lys Lys Gly Leu Gln Lys Ile Leu
108                 125                 130                 135
110 aac gtg caa aaa aag ctc cca atc atc caa aaa att att atc atg gat   1686
111 Asn Val Gln Lys Lys Leu Pro Ile Ile Gln Lys Ile Ile Ile Met Asp
112         140                 145                 150
114 tct aaa acg gat tac cag gga ttt cag tcg atg tac acg ttc gtc aca   1734
115 Ser Lys Thr Asp Tyr Gln Gly Phe Gln Ser Met Tyr Thr Phe Val Thr
116     155                 160                 165
118 tct cat cta cct ccc ggt ttt aat gaa tac gat ttt gtg cca gag tcc   1782
119 Ser His Leu Pro Pro Gly Phe Asn Glu Tyr Asp Phe Val Pro Glu Ser
120 170                 175                 180                 185
122 ttc gat agg gac aag aca att gca ctg atc atg aac tcc tct gga tct   1830
123 Phe Asp Arg Asp Lys Thr Ile Ala Leu Ile Met Asn Ser Ser Gly Ser
124                 190                 195                 200
126 act ggt ctg cct aaa ggt gtc gct ctg cct cat aga act gcc tgc gtg   1878
127 Thr Gly Leu Pro Lys Gly Val Ala Leu Pro His Arg Thr Ala Cys Val
128             205                 210                 215
130 aga ttc tcg cat gcc aga gat cct att ttt ggc aat caa atc att ccg   1926
131 Arg Phe Ser His Ala Arg Asp Pro Ile Phe Gly Asn Gln Ile Ile Pro
132         220                 225                 230
134 gat act gcg att tta agt gtt gtt cca ttc cat cac ggt ttt gga atg   1974
135 Asp Thr Ala Ile Leu Ser Val Val Pro Phe His His Gly Phe Gly Met
136 235                 240                 245
138 ttt act aca ctc gga tat ttg ata tgt gga ttt cga gtc gtc tta atg   2022
139 Phe Thr Thr Leu Gly Tyr Leu Ile Cys Gly Phe Arg Val Val Leu Met
140 250                 255                 260                 265
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143 Tyr Arg Phe Glu Glu Glu Leu Phe Leu Arg Ser Leu Gln Asp Tyr Lys
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146 att caa agt gcg ctg ctg gtg cca acc cta ttc tcc ttc ttc gcc aaa     2118
147 Ile Gln Ser Ala Leu Leu Val Pro Thr Leu Phe Ser Phe Phe Ala Lys
148                 285             290             295
150 agc act ctg att gac aaa tac gat tta tct aat tta cac gaa att gct     2166
151 Ser Thr Leu Ile Asp Lys Tyr Asp Leu Ser Asn Leu His Glu Ile Ala
152                 300             305             310
154 tct ggt ggc gct ccc ctc tct aag gaa gtc ggg gaa gcg gtt gcc aag     2214
155 Ser Gly Gly Ala Pro Leu Ser Lys Glu Val Gly Glu Ala Val Ala Lys
156     315             320             325
158 agg ttc cat ctg cca ggt atc agg caa gga tat ggg ctc act gag act     2262
159 Arg Phe His Leu Pro Gly Ile Arg Gln Gly Tyr Gly Leu Thr Glu Thr
160 330             335             340             345
162 aca tca gct att ctg att aca ccc gag ggg gat gat aaa ccg ggc gcg     2310
163 Thr Ser Ala Ile Leu Ile Thr Pro Glu Gly Asp Asp Lys Pro Gly Ala
164                 350             355             360
166 gtc ggt aaa gtt gtt cca ttt ttt gaa gcg aag gtt gtg gat ctg gat     2358
167 Val Gly Lys Val Val Pro Phe Phe Glu Ala Lys Val Val Asp Leu Asp
168                 365             370             375
170 acc ggg aaa acg ctg ggc gtt aat caa aga ggc gaa ctg tgt gtg aga     2406
171 Thr Gly Lys Thr Leu Gly Val Asn Gln Arg Gly Glu Leu Cys Val Arg
172                 380             385             390
174 ggt cct atg att atg tcc ggt tat gta aac aat ccg gaa gcg acc aac     2454
175 Gly Pro Met Ile Met Ser Gly Tyr Val Asn Asn Pro Glu Ala Thr Asn
176     395             400             405
178 gcc ttg att gac aag gat gga tgg cta cat tct gga gac ata gct tac     2502
179 Ala Leu Ile Asp Lys Asp Gly Trp Leu His Ser Gly Asp Ile Ala Tyr
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182 tgg gac gaa gac gaa cac ttc ttc atc gtt gac cgc ctg aag tct ctg     2550
183 Trp Asp Glu Asp Glu His Phe Phe Ile Val Asp Arg Leu Lys Ser Leu
184                 430             435             440
186 att aag tac aaa ggc tat cag gtg gct ccc gct gaa ttg gaa tcc atc     2598
187 Ile Lys Tyr Lys Gly Tyr Gln Val Ala Pro Ala Glu Leu Glu Ser Ile
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190 ttg ctc caa cac ccc aac atc ttc gac gca ggt gtc gca ggt ctt ccc     2646
191 Leu Leu Gln His Pro Asn Ile Phe Asp Ala Gly Val Ala Gly Leu Pro
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194 gac gat gac gcc ggt gaa ctt ccc gcc gcc gtt gtt gtt ttg gag cac     2694
195 Asp Asp Asp Ala Gly Glu Leu Pro Ala Ala Val Val Val Leu Glu His
196     475             480             485
198 gga aag acg atg acg gaa aaa gag atc gtg gat tac gtc gcc agt caa     2742
199 Gly Lys Thr Met Thr Glu Lys Glu Ile Val Asp Tyr Val Ala Ser Gln
200 490             495             500             505
202 gta aca acc gcg aaa aag ttg cgc gga gga gtt gtg ttt gtg gac gaa     2790
203 Val Thr Thr Ala Lys Lys Leu Arg Gly Gly Val Val Phe Val Asp Glu
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206 gta ccg aaa ggt ctt acc gga aaa ctc gac gca aga aaa atc aga gag     2838
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207 Val Pro Lys Gly Leu Thr Gly Lys Leu Asp Ala Arg Lys Ile Arg Glu
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211 Ile Leu Ile Lys Ala Lys Lys Gly Gly Lys Ile Ala Val
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214 gcttggatcc aatcaacctc tggattacaa aatttgtgaa agattgactg gtattcttaa  2943
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218 tgcttcccgt atggctttca ttttctcctc cttgtataaa tcctggttgc tgtctcttta  3063
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258 ggggctccct ttagggttcc gatttagtgc tttacggcac ctcgacccca aaaaacttga  4263
260 ttagggtgat ggttcacgta gtgggccatc gccccgatag acggtttttc gccctttgac  4323
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Output Set: **N:\CRF4\07152005\J604340A.raw**

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308 gcaaacaaaa aaaccaccgc taccagcggt ggtttgtttg ccggatcaag agctaccaac   5763
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312 gtagccgtag ttaggccacc acttcaagaa ctctgtagca ccgcctacat acctcgctct   5883
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353 Tyr Ala Leu Val Pro Gly Thr Ile Ala Phe Thr Asp Ala His Ile Glu
354         35                  40                  45
357 Val Asp Ile Thr Tyr Ala Glu Tyr Phe Glu Met Ser Val Arg Leu Ala
358     50                  55                  60
361 Glu Ala Met Lys Arg Tyr Gly Leu Asn Thr Asn His Arg Ile Val Val
362 65                  70                  75                  80
365 Cys Ser Glu Asn Ser Leu Gln Phe Phe Met Pro Val Leu Gly Ala Leu
366             85                  90                  95
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370             100                 105                 110
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378     130                 135                 140
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382 145                 150                 155                 160
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 07/15/2005
PATENT APPLICATION: **US/10/604,340A**   TIME: 08:17:02

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Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

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VERIFICATION SUMMARY   DATE: 07/15/2005
PATENT APPLICATION: US/10/604,340A   TIME: 08:17:02

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